



TANGO
Device
Server

RF_RetrigAO_project

User's Guide

RF_RetrigAO Class

Revision: release_1_0_1 - Author: elattaoui
Implemented in C++

Introduction:

This class uses the RetrigAO DeviceServer services. Its goal is to generate a waveform, which contains 100 points, synchronised with the synchro Linac. NOTE : the most important is to ensure the first and the last point, of the waveform, are strictly equals.

Class Inheritance:

- Tango::Device_3Impl
 - RF_RetrigAO

Properties:

Device Properties		
Property name	Property type	Description
RetrigAOProxyName	Tango::DEV_STRING	Name of the RetrigAO Device Server

Device Properties Default Values:

Property Name	Default Values
RetrigAOProxyName	No default value

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
channelNumber : channel number used on the SAO card	DEV_SHORT	READ_WRITE	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
waveformData : Data of the waveform which will be generated at each LINAC Trigger.	DEV_DOUBLE	10000	No

Commands:

More Details on commands....

Device Commands for Operator Level

Command name	Argument In	Argument Out
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
Start	DEV_VOID	DEV_VOID
Stop	DEV_VOID	DEV_VOID

1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection. After an Init command executed on a device, it is not necessary for client to re-connect to the device. This command first calls the device *delete_device()* method and then execute its *init_device()* method. For C++ device server, all the memory allocated in the *nit_device()* method must be freed in the *delete_device()* method. The language device desctructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**

2 - State

- **Description:** This command gets the device state (stored in its *device_state* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_STATE : State Code
- **Command allowed for:**

3 - Status

- **Description:** This command gets the device status (stored in its *device_status* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
CONST_DEV_STRING : Status description
- **Command allowed for:**

4 - Start

- **Description:** Outputs the waveform defined
- **Argin:**
DEV_VOID : no argin
- **Argout:**
DEV_VOID : no argout
- **Command allowed for:**

5 - Stop

- **Description:** Stops the waveform generation.
- **Argin:**
DEV_VOID : no argin
- **Argout:**
DEV_VOID : no argout
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